Pump Laser Specifications

Value

Wavelength

1064.15 nm

Linewidth

< 15 pm

Spatial mode

TEM00

Beam Roundness

>90%, circular

Beam Diameter

< 3 mm 1/e² points

Pointing stability

< 100 micro radians

Pulsewidth

<20 ns

Rep-rate

250 Hz

Energy per pulse

>30 mJ

Energy Stability

< 3 % rms

Average Power

> 7.5 W

Polarization

Better than 500:1

Triggering

External TTL

UV NLO Specifications

Value

Online Wavelength

290.7 nm

Offline Wavelength

(NASA Supplied)

Online energy

1 mJ nominal

Offline energy

(NASA Supplied)

Beam Diameter

<1.5 mm at exit

Divergence

~ 3 mrad

Pulsewidth

<15 ns

Rep-rate

250 Hz

Average Power

~ 0.25 W at 290.7 nm & 250 Hz

Polarization

Better than 500:1

Switching

(NASA Supplied)

UV Laser

Physical Parameters

Laser Head

24" x 10" x 8"

- Size: (L x W x H) - Weight 30 lbs

Power Supply & Chiller

- Size: (L x W x H) 19" x 19" x 19" - Weight 70 lbs

Umbilical 6 feet

Cooling Water based chiller

Power 10 A, & 110VAC for entire system

Less than 15% average power variations over a 4 hour continuous run Stability